TECHNIQUE FOR IMPROVING TRANSPORT PROTOCOL PERFORMANCE IN LOSSY NETWORKS

Abstract of the Disclosure

The present invention provides an improved transport protocol for lossy networks. This is accomplished by using computationally efficient techniques to manage invoking congestion control mechanisms to control the transmitted packets in lossy networks. The improved transport protocol receives multiple packets including a header and an associated sequence number. The network is monitored for congestion caused by the received packets and marks the header of some of the packets with an impending congestion indication, based on the outcome of the monitoring. The packets are then transmitted, and a receiver then returns acknowledgements of receipt of each of the transmitted packets. Each of the received acknowledgements includes an associated sequence number and any impending congestion indication assigned to the packet. The protocol monitors each of the received acknowledgements, and based on the outcome of the monitoring, invokes a congestion control mechanism to improve the performance of the transport protocol.